

Sub B1  
1. (amended) A control method for a magnetic disk drive having a processing unit controlling the magnetic disk drive, a magnetic head reading information on a magnetic disk medium, and an electronic circuit having a function to amplify said information read from said magnetic disk medium, a function to detect back electromotive force from a VCM actuator, a function to convert said back electromotive force detected as an analog value to a digital value, and a function to transfer said amplified readout information signal to said processing unit, the method comprising [the steps of]:

[1st] a first step [for] of stopping [supplying an] the supply of electric power to the whole of or a part of said functions to amplify said information read from said magnetic disk medium and to transfer said amplified readout information signal to said processing unit[,];

[2nd] a second step [for seeking] of moving said magnetic head by using said back electromotive force of said VCM actuator[,];

[3rd] a third step [for] of starting [supplying] the supply of an electric power to the whole of or a part of said functions to amplify said information read from said magnetic disk medium and to transfer said amplified readout information signal to said processing unit[,];

[4th] a fourth step [for secondly] of again stopping [supplying] the supply of an electric power to the whole of or a part of said functions to amplify said information read from said magnetic disk medium and to transfer said amplified readout information signal to said processing unit[,]; and

[5th] a fifth step [for secondly seeking] of again moving said magnetic head by using said back electromotive force of said VCM actuator.

2. (amended) The control method according to claim 1, further comprising between [3rd] said third step and [4th] said fourth step,

an additional step [for] of amplifying said information read from said magnetic disk medium.

3. (amended) The control method according to claim 1, wherein the procedure from [3rd] said third step to [5th] the fifth step is repeated [regularly or] irregularly.

A 4. (amended) The control method according to claim 1, wherein the procedure from [3rd] the third step to [5th] the fifth step is repeated [with] according to a geometric series[-like], [a] an exponential function[-like], or an elementary function[-like period], or is repeated with [such] a period [as] such that said seek velocity is kept at a constant value.

5. (amended) A control method for a magnetic disk drive having a processing unit which controls the magnetic disk drive, an MR head which reads information on a magnetic disk medium, a read-write IC which has a function to amplify the information read from the magnetic disk medium and a function to shut off a sense current to the MR head and to provide it

to the MR head, and an electronic circuit which has a function to detect a back electromotive force from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a read-write channel to transfer [an] amplified information to the processing unit, the method comprising [the steps of]:

[1st] a first step in which the sense current is shut off and [an] electric power is stopped in the whole of or a part of the read-write IC and the read-write channel[,];

[2nd] a second step in which the MR head is moved by using [the] a back electromotive force of the VCM actuator[,];

[3rd] a third step in which the sense current is provided and [an] electric power is supplied to the whole of or the part of the read-write IC and the read-write channel[,];

[4th] a fourth step in which [the] information read from the magnetic disk medium is amplified[,];

[5th] a fifth step in which the sense current is shut off and [an] electric power is stopped in the whole of or the part of the read-write IC and the read-write channel[,]; and

[6th] a sixth step in which the MR head is moved by using the back electromotive force of the VCM actuator.

6. (amended) A magnetic disk drive, comprising:  
a processing unit which controls the magnetic disk drive[,];

a magnetic head which reads information on a magnetic disk medium[,]; and

an electronic circuit which has a function to amplify

[the] information read from the magnetic disk medium, a function to detect a back electromotive force as an analog value from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a function to transfer the amplified information to the processing unit[,];

wherein the magnetic disk drive has:

a function to execute an idle seek operation by using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium, and

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a function to amplify, after the idle seek operation, the information read from the magnetic disk medium, to obtain [a position] information concerning the position of the magnetic head, and then to change [a] the direction of the idle seek operation.

7. (amended) A magnetic disk drive, comprising:

a processing unit which controls the magnetic disk drive[,];

a magnetic disk medium[,];

a magnetic head which reads information on the magnetic disk medium[,]; and

an electronic circuit which has a function to amplify [the] information read from the magnetic disk medium, a function to detect back electromotive force from as an analog value a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital

value, and a function to transfer the amplified information to the processing unit[,];

wherein the magnetic disk drive executes an idle seek operation by using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium.

A 8. (amended) The magnetic disk drive according to claim 7, wherein if the magnetic disk drive has a magnetic disk medium having 8000 cylinders [on it's surface], then a direction of the idle seek is reversed when the magnetic head is in a range from the 0th cylinder to the 500th cylinder and in a range from the 7500th cylinder to the 8000th cylinder on the magnetic disk medium.

9. (amended) A magnetic disk drive, comprising:  
a processing unit controlling the magnetic disk drive[,];  
a magnetic disk medium[,];  
a magnetic head reading information on the magnetic disk medium[,]; and

an electronic circuit having a function to amplify the information read from the magnetic disk medium, a function to detect a back electromotive force from a VCM actuator, a function to output a signal corresponding to the back electromotive force, and a function to transfer the amplified information to the processing unit[,];

wherein the magnetic disk drive executes an idle seek operation by using the back electromotive force of the VCM

actuator without amplifying the information read from the  
magnetic disk medium.

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IN THE ABSTRACT OF THE DISCLOSURE:

Please replace the original abstract with the following  
new abstract: